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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,102	12/18/2001	Alan W. Peters	W9003-04	4840

7590 07/22/2003
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EXAMINER

YILDIRIM, BEKIR L

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,102

Applicant(s)

PETERS ET AL.

Examiner

Bekir L. YILDIRIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 10-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-6, 10-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not known what is meant by "containing 50%" since nothing has been recited thereafter.

Either the recitation of a substance(s) is missing or "containing" is misused.

Claim Objections

2. Claims 14-18 are objected to because of the following informalities: "mixtures thereof" in claims 14 and 17 is misused since it refers only to "an alkaline earth metal". The applicant might mean "an alkaline earth metal or mixtures of (two or more) alkaline earth metals".

Appropriate correction is required.

Double Patenting

3. In response to the amendments to the claims, the nonstatutory double patenting rejection of Claims 1-18 in the previous office action is hereby withdrawn.

Claim Rejections - 35 USC § 103

4. Claims 1, 3-6, 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vasalos et al. (USP 4,153,535).

The reference discloses an FCC catalyst comprising a cracking component and a component, which is deemed based on the totality of the disclosure to function as the combustion promotion component, which comprises the applicant's components including palladium, rare earth metal oxides, e.g. that of cerium and alkaline metals, e.g. calcium, strontium, barium alone or combination, in overlapping proportions with those of the claims. The combustion component may be in the same particle as the cracking component or in separate particles (see col. 4, lines 18-40, 65-68; col. 5, lines 1-17, 30-43; col. 8, lines 13-28; col. 10, lines 13-14, col. 14, lines 28-61).

It is acknowledged that the reference does not disclose the exact amount ranges in the applicant's claims and that the reference does not disclose the specific combinations disclosed in the claims. The invention as a whole however would have been obvious to one having ordinary skill in the art because the selection of a combination from the limited number of combinations disclosed in the reference, or the determination of the workable range of the metal components would have been within the ordinary skill. See In re Aller, Lacey, and Hall, 105 USPQ 233 (CCPA 1955) In re Swain et al., 33 C.C.P.A. (Patents) 1250, 156 F.2d 239, 70 USPQ 412 ; Minnesota Mining and Mfg. Co. v. Coe, 69 App. D.C. 217, 99 F.2d 986, 38 USPQ 213 ; Allen et al. v. Coe, 77 App. D. C. 324, 135 F.2d 11, 57 USPQ 136 .

Response to Arguments

5. Applicant's arguments filed on 5/20/2003 have been fully considered but they are not persuasive. The applicant argues that Vasalos et al. "fails to teach or at all mention the a NOx

reduction composition". Be that as it may however the issue is moot since the instant claims do not mention them either. The applicant further stresses the difficulty of arriving at the applicant's specific composition of components from lengthy lists provided by Vasalos et al. While it is true that Vasalos et al. provides a number of suitable components for the composition the applicant's composition has a number of combinations too. Furthermore, the applicant's components are among the Vasalos et al's "ideal" (col. 5, line 17, and line 42) or "most preferred" (col. 5, line 42). The artisan with ordinary skill need not test all possible combinations; testing the "ideal" or "most preferred" would reduce the number substantially, bringing it close to the number of combinations claimed. Given that the claimed combinations are rendered obvious, the catalyst amounts are result-effective, the determination of the workable ranges, within the overlapping ranges Vasalos et al. provides, is maintained to be within the ordinary skill in the art.

The rejection therefore stands.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bekir L. YILDIRIM whose telephone number is (703) 308-3586. The examiner can normally be reached on 10:30-8:00 (alternating Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 872-9467 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0611.

BLY
July 21, 2003



Bekir L. Yildirim
Primary Examiner